REMARKS

Claims 1-50 and 52-63 are presently pending in the case.

Reconsideration of the present case in view of the above amendments and the remarks herein is requested.

Allowable Claims

Applicant acknowledges with appreciation the Examiner's indication that claims 52-60 are allowable and that dependent claims 19, 20, 22, 30-36, 40-42, 50, and 63 contain allowable subject matter. Claims 19, 20, 22, 30-36, 40-42, 50, and 63 have not been placed in independent form since they depend from an allowable claim, as discussed below.

Claim rejections under 35 USC 103(a)

The Examiner rejected claims 1, 3-7, 11, 15, 16, 18, 21, 25-29, 38, 39, 45-49, 61, and 62 under 35 USC 103(a) as being unpatentable over U.S. Patent 5,740,794 to Smith et al (hereinafter Smith et al) in view of PCT Publication WO 99/44663 to McGinn et al (hereinafter McGinn et al). The rejection is traversed.

Smith et al does not render claim 1, for example, unpatentable. Claim 1 is to a method for conditioning a packaged powder, the method comprising, inter alia, providing at least one pulse of energy to the receptacle to increase the efficiency at which the powder may be extracted from the chamber and flowing a gas through the chamber to aerosolize the powder. Smith et al discloses the step of flowing a gas through the chamber to aerosolize the powder but does not disclose or suggest providing at least one pulse of energy to the receptacle to increase the efficiency at which the powder may be extracted from the chamber. Thus, Smith et al does not render claim 1 unpatentable.

McGinn et al also does not render claim 1 unpatentable. As discussed above, claim 1 is to a method for conditioning a packaged powder, the method comprising, inter alia, providing at least one pulse of energy to the receptacle to increase the efficiency at which the powder may be extracted from the chamber and flowing a gas through the chamber to aerosolize

the powder. McGinn et al discloses the application of a pulse of energy, but for the purpose of aerosolization. McGinn et al does not disclose providing a pulse of energy to increase aerosolization efficiency and flowing a gas through the chamber to aerosolize the powder. Thus, McGinn et al also fails to render claim 1 unpatentable.

Claim 1 is also not rendered unpatentable by the combination of Smith et al and McGinn et al. Smith et al and McGinn et al disclose two different types of aerosolization mechanisms. Neither teaches a system such as that claimed where a pulse of energy is provided to increase the efficiency at which the powder may be extracted from the chamber and flowing a gas through the chamber to aerosolize the powder. In the case of Smith et al, there is no pulse of energy and in the case of McGinn et al the burst of energy is for the purpose of forming an aerosolized cloud (page 24 lines 16-20). The Examiner appears to be of the position that one of ordinary skill in the art would have found it obvious to use two different types of aerosolization mechanisms in the same device. However, this modification is not suggested by the prior art and would therefore not have been obvious. Further more the person of ordinary skill would not have found it obvious to make the proposed modification when considering the teaching of the references as a whole. As can be seen in Figures 12A and 12B of Smith et al, the aerosolization mechanism of Smith et al is the flowing of air and the drawing of powder through the feedtube (element 106). If one were to provide a pulse of energy to aerosolize a cloud of powder in accordance with the teachings of McGinn et al it is unclear where cloud would be generated and more importantly why the cloud would be necessary. Therefore, since there is no suggestion to combine two disparate aerosolization mechanisms and because it is unclear how or why they would be combined anyway, one of ordinary skill in the art at the tine the invention was made would not have found it obvious in view of Smith et al and McGinn et al to arrive at the invention of present claim 1.

Smith et al and McGinn et al do not render claim 15 unpatentable, either. Claim 15 is to a powder conditioning system comprising, inter alia, a receptacle, a mechanism to provide at least one pulse of energy to the receptacle, and an aerosolization mechanism to aerosolize powder in the receptacle by flowing gas through the chamber. As discussed above, Smith et al and McGinn et al do not teach both a mechanism to provide a pulse of energy and an aerosolization mechanism. Therefore, Smith et al and McGinn et al do not render claim 15 and its depending claims unpatentable.

Additionally, Smith et al and McGinn et al do not render claim 61 unpatentable. Claim 61 is to a method for aerosolizing a powder comprising, inter alia, placing a receptacle into an aerosolization device having an aerosolization system for extracting the powder from the receptacle by flowing gas through a chamber and a mechanism to provide at least one pulse of energy to the receptacle. Smith et al and McGinn et al do not teach a system for extracting a powder by flowing gas through a chamber and a mechanism to provide a pulse of energy to a receptacle, as discussed above. Accordingly, Smith et al and McGinn et al do not render claim 61 or its depending claims unpatentable.

The Examiner rejected claims 1, 8-11, 13-15, 23, 24, 26, 27, 37, 43-45, and 61 under 35 USC 103(a) as being unpatentable over Smith et al in view of US Patent 5,694,920 to Abrams et al (hereinafter Abrams et al). The rejection is traversed.

Smith et al and Abrams et al do not render claim 1 unpatentable. Claim I is to a method for conditioning a packaged powder, the method comprising, inter alia, providing at least one pulse of energy to the receptacle to increase the efficiency at which the powder may be extracted from the chamber and flowing a gas through the chamber to aerosolize the powder. Smith et al does not teach the method of claim 1, as discussed above. Additionally, Abrams does not teach the method of claim 1. Abrams discloses vibrating a powder for deaggregation of the powder. However, Abrams does not disclose providing a pulse of energy and flowing a gas through the chamber to aerosolize the powder. Instead, Abrams aerosolizes the powder using electrostatic charge. If one of ordinary skill in the art at the time the invention were to modify the Smith et al device in accordance with the teachings of Abrams et al, then a vibration/electrostatic aerosolization mechanism would be used instead of the air flow aerosolization of claim 1. One of ordinary skill in the art would not have been motivated, based on the teachings of Smith et al as a whole and Abrams et al as a whole, to arrive at the invention recited in present claim 1. Accordingly, claim 1 and its dependent claims are not rendered unpatentable by Smith et al and Abrams et al.

Smith et al and Abrams et al also do not render claim 15 unpatentable. Claim 15 is to a powder conditioning system comprising, inter alia, a receptacle, a mechanism to provide at least one pulse of energy to the receptacle and an aerosolization mechanism to aerosolize powder in the receptacle by flowing gas through the chamber. Smith et al and Abrams et al do not disclose a mechanism to provide a pulse of energy and an aerosolization mechanism that

aerosolizes by flowing gas through the chamber. Therefore, Smith et al and Abrams et al do not render claim 15 and its depending claims unpatentable.

Additionally, Smith et al and Abrams et al do not render claim 37 unpatentable. Claim 37 is to a powder dispersion device comprising, inter alia, an aerosolization system in the housing to extract the powder from the receptacle and to entrain the powder in a gas stream to form an aerosol by flowing gas through a chamber and a mechanism to provide at least one pulse of energy to the receptacle prior to aerosolization to increase the efficiency at which the powder may be extracted from the chamber when flowing a gas through the chamber. As discussed above, neither Smith et al nor Abrams et al disclose an aerosolization system in the housing to extract the powder from the receptacle and to entrain the powder in a gas stream to form an aerosol by flowing gas through a chamber and a mechanism to provide at least one pulse of energy to the receptacle prior to aerosolization to increase the efficiency at which the powder may be extracted from the chamber when flowing a gas through the chamber. Therefore, Smith et al and Abrams et al do not render claim 37 and its depending claims unpatentable.

The Examiner also rejected claim 2 under 35 USC 103(a) as being unpatentable over Smith et al and McGinn et al further in view of U.S. Patent 6,167,880 to Gorda et al (hereinafter Gorda et al). The rejection is traversed. The proposed modifications do not make up for the deficiencies of Smith et al and McGinn et al discussed above. Accordingly, claim 2 is not rendered unpatentable by Smith et al, McGinn et al and Gorda et al.

The Examiner also rejected claim 12 under 35 USC 103(a) as being unpatentable over Smith et al and McGinn et al further in view of Abrams et al. The rejection is traversed. The proposed modifications do not make up for the deficiencies of Smith et al, McGinn et al and Abrams et al discussed above. Accordingly, claim 12 is not rendered unpatentable by Smith et al, McGinn et al and Abrams et al.

Conclusion

The claims are allowable for the reasons given above. Thus, the Examiner is respectfully requested to reconsider the present rejections and allow the presently pending claims. Should the Examiner have any questions, the Examiner is requested to call the undersigned at the number given below.

Respectfully submitted,

NEKTAR THERAPEUTICS (formerly INHALE THERAPEUTIC SYSTEMS)

Dated: 12 JUL 2000

Guy V. Tucker Reg. No. 45,302

Please send all correspondence to: Guy Tucker Nektar Therapeutics (formerly Inhale Therapeutic Systems, Inc.) 150 Industrial Road San Carlos, CA 94070 Phone: (650) 620-5501

Fax: (650) 631-3125